The E.P Forrestel Water Treatment Facility

-and-

The Akron Water System

Present the:

Annual Water Quality Report

For the Year of 2003

Annual Drinking Water Quality Report for 2003
Village of Akron Water System
21 Main St, Akron 14001
(Public Water Supply ID# 1400397)

INTRODUCTION

To comply with State regulations, the Village of Akron will be annually issuing a report describing the quality of your drinking water. The purpose of this report is to raise your understanding of drinking water and awareness of the need to protect our drinking water sources. Last year, **your tap water met all State drinking water standards.** This report provides an overview of last year's water quality. Included are details about where your water comes from, what it contains, and how it compares to State standards.

If you have any questions about this report or concerning your drinking water, please contact **Mr. Robert Kowalik, Superintendent of Public Works, at 542-2680.** We want you to be informed about your drinking water. If you want to learn more, please attend any of our regularly scheduled village board meetings. The meeting schedule is available from the Village Clerk's Office, located at 21 Main St, Akron, NY 14001, or by calling 542-9636.

WHERE DOES OUR WATER COME FROM?

In general, the sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally-occurring minerals and can pick up substances resulting from the presence of animals or from human activities. Contaminants that may be present in source water include microbial contaminants; inorganic contaminants; pesticides and herbicides; organic chemical contaminants; and radioactive contaminants. In order to ensure that tap water is safe to drink, the State and the EPA prescribe regulations which limit the amount of certain contaminants in water provided by public water systems. The State Health Department's and the FDA's regulations establish limits for contaminants in bottled water which must provide the same protection for public health.

Our water source is the Murder Creek Reservoir, which is located in the Town of Bennington, NY. The E.P Forrestel Water Treatment Plant is located adjacent to the reservoir, in the Town of Darien Center. Last year, we isolated out connection to the Town of Darien when they switched to Monroe County Water Authority. Water at the Akron treatment plant is chlorinated and filtered using the coagulation, flocculation, sedimentation, and filtration process.

FACTS AND FIGURES

Our water system serves roughly 3000 people in the village through 1264 service connections. We also serve 13 industrial accounts, two water districts in the Town of Newstead, and 39 easement customers living along the transmission line between the Water Plant and the village. The total water produced in 2003 was 187.5 million gallons. This was up from the 2002 production of 176.8 million gallons. The average amount of water treated each day was 513,616 gallons. Our highest daily production was 846,680 gallons. The amount of water delivered to customers was 172.3 million gallons. This leaves an unaccounted total of 15.2 million gallons, or 8.2% of the total water produced. This is down from 19.5% in the year 2000. The unaccounted total is attributed to fire department activity, hydrant use, water main and village maintenance, worn and inaccurate meters, and leaks. In 2003, water customers paid a base charge of $23.75 for the first 5000 gallons, and $4.75 per 1000 gallons consumed after that. Bills are mailed quarterly. The average residential water bill in 2003 was $62.45.

ARE THERE CONTAMINANTS IN OUR DRINKING WATER?

As the State regulations require, we routinely test your drinking water for numerous contaminants. These contaminants include: total coliform, turbidity, inorganic compounds, nitrate, nitrite, lead and copper, volatile organic compounds, total trihalomethanes, and synthetic organic compounds. The table presented below depicts which compounds were detected in your drinking water. The State allows us to test for some contaminants less than once per year because the concentrations of these contaminants do not change frequently. Some of our data, though representative, are more than one year old.

It should be noted that all drinking water, including bottled drinking water, might be reasonably expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the EPA's Safe Drinking Water Hotline (800-426-4791) or the Erie County Health Department at 716-858-7660.

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Table of Detected Contaminants

Contaminant	Violation Yes/No	Date of Sample	Level Detected (Avg./Max) (Range)	Unit Measure-ment	MCLG	Regulatory Limit (MCL, TT or AL)	Likely Source of Contamination
Turbidity (1)	No	Daily	High: 0.220 Low: 0.042 Avg: 0.076	NTU	N/A	TT= < 5.0 NTU	Soil Runoff
Copper	No	8/7/01	0.11 (2) Range: <0.02 – 0.16	mg/l	<1.3 mg/l	AL = 1.3 mg/l	Corrosion of household plumbing; erosion of natural deposits.
Lead	No	8/7/01	0.002 (3) Range: <0.001 to 0.002	mg/l	<0.015 mg/l	AL = 0.015 mg/l	Corrosion of household plumbing; erosion of natural deposits
Total Trihalomethanes	No	Quarterly	50.1 Avg.(4) Range: 19 to 91.0	mg/l	<80.0 mg/l	MCL = 100 mg/l	By–product of drinking water chlorination.

1 – Turbidity is a measure of the cloudiness of the water. We test it because it is a good indicator of the effectiveness of our filtration system.

2 – The level presented represents the 90th percentile of the 10 sites tested. A percentile is a value on a scale of 100 that indicates the percent of a distribution that is equal to or below it. The 90th percentile is equal to or greater than 90% of the copper values detected at your water system. In this case, ten samples were collected at your water system and the 90th percentile value was the 0.11mg/l value. The action level for copper was not exceeded at any of the sites tested.

3 – The level presented represents the 90th percentile of the ten samples collected. The action level for lead was not exceeded at any of the 10 sites tested.

4 – This level represents the annual quarterly average calculated from data collected.

Definitions: Definitions of the above chart are described on the next page.

Definitions:

Maximum Contaminant Level (MCL): The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible.
Maximum Contaminant Level Goal (MCLG): The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
Action Level (AL): The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
Treatment Technique (TT): A required process intended to reduce the level of a contaminant in drinking water.
Non-Detects (ND): Laboratory analysis indicates that the constituent is not present.
Nephelometric Turbidity Unit (NTU): A measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
Milligrams per liter (mg/l): Corresponds to one part of liquid in one million parts of liquid (parts per million - ppm).
Micrograms per liter (ug/l): Corresponds to one part of liquid in one billion parts of liquid (parts per billion - ppb).

WHAT DOES THIS INFORMATION MEAN?

As you can see by the table, our system had no violations. We have learned through our testing that some contaminants have been detected; however, these parameters were detected below the level allowed by the State. The Akron Water System constantly monitors the water being treated at the plant, and tests water in the system daily.

IS OUR WATER SYSTEM MEETING OTHER RULES THAT GOVERN OPERATIONS?

During 2003, our system was in compliance with applicable State drinking water operating, monitoring and reporting requirements. Security at the E.P. Forrestel Water Treatment Plant and the Akron water system is a high priority. The plant is monitored on a 24-hour basis, and plant operators are automatically notified of a problem or intrusion. The reservoir and watershed are patrolled daily on a random schedule to help ensure the security of the system. The distribution system is also monitored for any suspicious activity. In 2003, there were no problems with security issues in the system. Security vulnerability assessments have been performed and appropriate action is, and has been taken to ensure security.

DO I NEED TO TAKE SPECIAL PRECAUTIONS?

Although our drinking water met or exceeded state and federal regulations, some people may be more vulnerable to disease causing microorganisms or pathogens in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care provider about their drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by Cryptosporidium, Giardia and other microbial pathogens are available from the Safe Drinking Water Hotline (800-426-4791).

WHY SAVE WATER AND HOW TO AVOID WASTING IT?

Although our system has an adequate amount of water to meet present and future demands, there are a number of reasons why it is important to conserve water:

- Saving water saves energy and some of the costs associated with both of these necessities of life;
- Saving water reduces the cost of energy required to pump water and the need to construct costly new wells, pumping systems and water towers;
- Saving water lessens the strain on the water system during a dry spell or drought, helping to avoid severe water use restrictions so that essential fire fighting needs are met.

You can play a role in conserving water by becoming conscious of the amount of water your household is using, and by looking for ways to use less whenever you can. It is not hard to conserve water. Conservation tips include:

- Automatic dishwashers use 15 gallons for every cycle, regardless of how many dishes are loaded. So get a run for your money and load it to capacity.
- Turn off the tap when brushing your teeth.
- Check every faucet in your home for leaks. Just a slow drip can waste 15 to 20 gallons a day. Fix it up an you can save almost 6,000 gallons per year.
- Check your toilets for leaks by putting a few drops of food coloring in the tank, watch for a few minutes to see if the color shows up in the bowl. It is not uncommon to lose up to 100 gallons a day from one of these otherwise invisible toilet leaks. Fix it and you save more than 30,000 gallons a year.
- Use your water meter to detect hidden leaks. Simply turn off all taps and water using appliances, Then check the meter after 15 minutes, If it moved, you have a leak.

SYSTEM IMPROVEMENTS

In 2003, many improvements were made in the Akron Water System. Our two Microflock filters at the treatment plant were inspected for corrosion, and two flanges were replaced to ensure reliability. New flow meters were installed at the water plant and the Crittenden road water tank. These new meters provide us with better accuracy and should provide years of trouble free service. Old gates and signs were replaced on village watershed property to help maintain the security of the watershed. More security lighting has been installed in various locations. The water plant's carbon feeder and caustic feeder systems have been updated for reliability and safety. An Open House will be held on May 15th 2004 at the Akron Water Plant.

In the Distribution system, a 250' section of 4" waterline was replaced with a 8" line on Fassett street. This created a loop in the system and enabled a new fire hydrant to be installed, replacing an aging hydrant. Restoration work was performed on the Clarence Center water line, and most final service connections have been made. Old and worn meters are being replaced on an on-going basis. Fire hydrants were maintained and various hydrants were replaced with new units.

The Village of Akron's Backflow/cross connection program has been reviewed and updated to ensure the safety and integrity of the Akron Water System.

Thank you for allowing us at the Village of Akron Water System to continue to provide you and your family with quality drinking water in 2003. We ask that all our customers help us protect our water sources, which are the heart of our community. Please call the Village Office if you have any questions.